

ABSTRACT OF THE DISCLOSURE

A multicasting system and method for use in a shared memory-based switch that includes an input subqueue reading block for reading out data inputted thereto, selecting one bit from an output port bitmap at a time and outputting output port information of one bit and class information as a data stream together with an enable signal. The system also includes a queue number encoding block for encoding the bitmap type of output port information provided thereto from the input subqueue reading means, creating a queue number of the output subqueues based on the encoded output port information and the class information and outputting the same together with an enable signal; and an output subqueue writing block for writing an assigned non-use address of the output subqueues in a tail address of corresponding output subqueue, responsive to the information from the input subqueue reading means and replacing a subsequent tail address of the corresponding output subqueue with a newly assigned non-use address, thereby writing a corresponding pointer in the corresponding output subqueue.